IBM Copy Services Manager

# Release Notes November 2016

Version 6 Release 1

IBM Copy Services Manager

# Release Notes November 2016

Version 6 Release 1

Note:

Before using this information and the product it supports, read the information in "Notices" on page 9.

#### **Edition notice**

This edition applies to Version 6, Release 1, Modification 4 of IBM Copy Services Manager and to all subsequent releases and modifications until otherwise indicated in new editions.

#### © Copyright IBM Corporation 2005, 2016.

US Government Users Restricted Rights – Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

## Contents

About this document	•	•	•	. v
What's new				. vii
Prerequisites	•	•	-	. 1
General information	•	•	-	. 3
Known issues and workarounds	•	•	•	. 5
Notices				
Trademarks				

## About this document

This document contains the release notes in support of  $IBM^{\ensuremath{\mathbb{B}}}$  Copy Services Manager Version 6, Release 1, Modification 4.

## What's new

The following functions are introduced in IBM Copy Services Manager Version 6.1.4:

### Version 6, Release 1, Modification 4

This table provides the current technical changes and enhancements to Copy Services Manager as of November 2016.

Function or feature	Description
Support for Extent Space Efficient (ESE) to standard Peer-to-Peer Remote Copy (PPRC)	Copy Services Manager now supports the DS8000 Version 8.2 update to allow ESE and standard volumes to be in a PPRC relationship together.
Ubuntu support	You can now install Copy Services Manager on an Ubuntu system. The minimum level of support is version 16.04 LTS. The same platform restrictions apply for Ubuntu as for other Linux operating systems. For more information, see http://www- 01.ibm.com/support/ docview.wss?uid=ssg1S1005402, which details Copy Services Manager prerequisites.
Ability to install the DS8000 command-line interface (DS CLI) for z/OS when you install Copy Services Manager for z Systems <sup>™</sup>	You can now install the DS CLI along with Copy Services Manager on z/OS installations. The DS CLI runs under UNIX Services for z/OS, and has a separate FMID HIWN61K. You can also install the DS CLI separately from Copy Services Manager. For more information, see the <i>IBM DSCLI on</i> <i>z/OS Program Directory</i> . You can use the order number (GI13-3563) to search for it on the IBM Publications Center website at http://www.ibm.com/shop/publications/ order/.
Setting email and SNMP alerts by using the Copy Services Manager GUI	In addition to the CLI, you can now also set alerts from the GUI on the <b>Settings</b> > <b>Alert</b> <b>Notifications</b> page.

Table 1. What's new in Copy Services Manager Version 6.1.4 (November 2016)

Function or feature	Description
New postinstallation tasks for setting up RACF when you install Copy Services Manager for z Systems on z/OS	The <i>IBM Copy Services Manager Installation and</i> <i>Configuration Guide</i> now contains five optional RACF jobs to run after you install Copy Services Manager for z Systems. These jobs replace the previous single IWNRACF job, and grant the proper authorization for certain Copy Services Manager on z/OS features.
	These jobs define the following items:
	<ul> <li>Copy Services Manager default administrator and other user IDs</li> </ul>
	Copy Services Manager address spaces
	<ul> <li>HyperSwap address spaces</li> </ul>
	HyperSwap Sockets Server address space
	Copy Services Manager host connection IDs
New events for SVC auto restart and auto restart failure	New SNMP alerts are triggered in the following situations:
	• Any time a session is enabled for auto restart, and Copy Services Manager determines that the session can be auto restarted.
	• Any time a session is enabled for auto restart, but Copy Services Manager cannot restart it; or Copy Services Manager issued the restart, but errors occur.
Single direction support in port pairing CSV file	You can now define port pairings based on the direction of the copy by adding the string <b>onedir</b> to the end of any of the options in the portpairings.csv.sample file.
	The entries for the port pairs are bidirectional unless the last comma-separated entry on the line is the string <b>onedir</b> .
Updating the licenses when Copy Services Manager is running on a DS8000 Hardware Management Console (HMC)	You can update the licenses by typing in an activation key.
	The activation key is a string value that is provided for Try-and-Buy capabilities or through an export licenses action on an existing installation.
	You can access this feature by selecting the <b>Update Licenses</b> option from the main menu on the GUI, or from the <b>Settings</b> > <b>Administration</b> page.
Information about installing or upgrading Copy Services Manager on the HMC	You need to run specific commands to install or upgrade Copy Services Manager on a DS8000 HMC. These details are maintained in the DS8000 documentation.
Support for FlashSystem A9000 and A9000R	Starting with version 6.1.4, Copy Services Manager now offers storage connection support for the FlashSystem A9000 and A9000R models.

Table 1. What's new in Copy Services Manager Version 6.1.4 (November 2016) (continued)

Function or feature	Description
The option to maintain configuration files, and database backup logs, during an uninstallation of Copy Services Manager for distributed systems	For Copy Services Manager on distributed systems, you can now select the option to maintain these files when you uninstall. Doing so not only can help you to reinstall faster during an in-place re-installation, but it also preserves any user authentication that was previously set up on the server.

Table 1. What's new in Copy Services Manager Version 6.1.4 (November 2016) (continued)

## Prerequisites

Prerequisites for Copy Services Manager include supported operating systems, browsers, and storage systems.

The Copy Services Manager prerequisites can be found at http://www-01.ibm.com/support/docview.wss?uid=ssg1S1005402.

## **General information**

You can find more information about Copy Services Manager from the following resources:

#### **Getting support**

For technical support with this release of Copy Services Manager, go to the following websites:

- IBM System Storage products: http://www.ibm.com/servers/storage
- IBM Copy Services Manager Support Portal: http://www.ibm.com/ support/entry/portal/product/system\_storage\_software/ storage\_infrastructure\_management/ibm\_copy\_services\_manager

#### **Product documentation**

The Copy Services Manager online product documentation at http://www-01.ibm.com/support/knowledgecenter/SSESK4 contains all of the information that is required to install, configure, and manage Copy Services Manager. The online documentation is updated between product releases to provide the most current information.

You can order or download individual publications that have an order number from the IBM Publications website at http://www-05.ibm.com/e-business/linkweb/publications/servlet/pbi.wss.

Title	Description	Order number or location
IBM Copy Services Manager Installation and Configuration Guide	This guide provides task-oriented information for anyone who installs and configures IBM Copy Services Manager.	SC27-8543
IBM Copy Services Manager User's Guide	This guide provides task-oriented information for users of IBM Copy Services Manager. Users should be familiar with the following topics	SC27-8542
	<ul> <li>Copy Services concepts</li> <li>General principles of IBM AIX, Linux, Windows, and the IBM z/OS operating systems</li> </ul>	
	<ul> <li>Simple Network Management Protocol (SNMP) concepts</li> <li>Storage Area Network (SAN) concepts</li> </ul>	
IBM Copy Services Manager z/OS FlashCopy Manager User's Guide	This guide provides task-oriented information for those who administer FlashCopy operations in a z/OS environment.	SC27-8032

Table 2. Copy Services Manager product publications

Title	Description	Order number or location
IBM Copy Services Manager Release Notes	This document contains the release notes in support of IBM Copy Services Manager.	Search on IBM Copy Services Manager at IBM Fix Central (www.ibm.com/ support/fixcentral) to locate and download the Release Notes related to your product version.
IBM Copy Services Manager for z Systems Program Directory and IBM Copy Services Manager Basic Edition for z Systems Program Directory	These program directories are intended for system programmers who are responsible for program installation and maintenance. They contain information about the material and procedures associated with the installation of IBM Copy Services Manager for z Systems and IBM Copy Services Manager Basic Edition for z Systems.	http://ibm.co/ 1PWppUO Order number for the IBM Copy Services Manager for z Systems Program Directory is GI13-4517 Order number for the IBM Copy Services Manager Basic Edition for z Systems Program Directory is GI13-4518
Program Directory for IBM Copy Services Manager FlashCopy Manager for IBM Copy Services Manager for z Systems	This guide is intended for the system programmer or storage administrator of the IBM Copy Services Manager z/OS FlashCopy <sup>®</sup> Manager utility.	GI11-2904
IBM DSCLI on z/OS Program Directory	This program directory is intended for system programmers who are responsible for program installation and maintenance. It contains information about the material and procedures associated with the installation of the IBM Copy Services Manager on the DS8000 <sup>®</sup> HMC for access to the DS8000 CLI.	GI13-3563

Table 2. Copy Services Manager product publications (continued)

## Known issues and workarounds

The following information describes current known issues with IBM Copy Services Manager Version 6.1.4 and any associated workarounds.

Table 3. IBM Copy Services Manager Version 6.1.4 known issues and workarounds

Issue	Explanation and possible workaround
When defined with the same consistency group name, all sessions that share the same DS8000 storage system have the same Master/Subordinate topology, even if there are sessions that do not span the same set of storage systems.	Copy Services Manager supports assigning the same consistency group name to multiple Global Mirror sessions. Master/Subordinate sessions for DS8000 are supported, but limited testing was completed for different combinations of Master/Subordinate configurations, due to environment limitations. Consult with IBM Support to ensure proper coverage of your required configuration.
When more than 256 Copy Services Manager sessions are assigned the same consistency group name, internal issues are encountered.	Limit the number of sessions with the same consistency group name to under 256. This issue will be addressed in a future release.
The Global Mirror options are not synced across sessions that share the same consistency group name. Therefore, when the Global Mirror Master is started, it uses the options that were defined for one of the sessions.	In Copy Services Manager, you can modify certain options for Global Mirror sessions, such as the consistency-group interval time. Ensure that all sessions that have the same consistency group name are also defined with the same Global Mirror options.
When the Global Mirror data for a session is exported, gaps might result with no data while the session was in a suspended state.	When a Global Mirror session that shares a consistency group name with other sessions is suspended, the suspended session is removed from the Master on the hardware while the other sessions are restarted and continue to form consistency groups. When a session is removed from the Master, Copy Services Manager stops collecting historical Global Mirror data for that session. This code limitation has no current workaround.
Copy Services Manager does not support the ability to change the Master of the Metro Global Mirror session from the H2 volumes to the H1 volumes without affecting the other Global Mirror sessions that share the consistency group name.	Copy Services Manager supports the ability to use the same consistency group name across a Metro Global Mirror session. However, when running H1>H2, if you issue either a Start H1>H3 to complete an Incremental Resync, or you issue a Suspend/Recover/Start H2H1H3 to switch the direction of the session, the Global Mirror session is terminated at site 2, which affects the other shared Global Mirror sessions. This is a code limitation with no current workaround.

Issue	Explanation and possible workaround
Copy Services Manager does not support local OS authentication.	When you migrate from a Tivoli <sup>®</sup> Storage Productivity Center for Replication installation that uses local OS authentication to a Copy Services Manager installation (see the <i>IBM Copy Services Manager Installation</i> <i>and Configuration Guide</i> for migration instructions), local OS users are displayed on the Administration page with an indication that they were not found in either the LDAP or Basic User Registries. Delete these local OS users, and then either create new basic users for local users, or configure LDAP to use LDAP users or groups for authentication.
There is a known DS8000 issue on certain microcode levels when a relationship is running in Global Copy and switched to a Metro Mirror mode. An error occurs indicating that the multi-target feature is not supported. This problem might be encountered on Multi-Target Metro Mirror - Global Mirror and Multi-Target Metro Mirror - Global Mirror with Practice session types.	Suspend the Metro Mirror pairs, and then restart to work around the issue.
After a Recover to Site 3 for a Metro Mirror - Global Mirror with Practice session using count-key data (CKD) volumes, when a Start H3->H1->H2 or Start H3->H2->H1 command is issued, the hardware might return an error code 0F74 with Sense Byte 9 set to 0A on the H1-H3 relationships. This situation leads to a full copy of the data from H3 to H1.	There is a known issue after recovering to site 3 for a Metro Mirror - Global Mirror with Practice session using CKD volumes. The Start H3->H1->H3 and Start H3->H2->H1 command attempt to establish failed over relationships from the H3 volume back to H1 to avoid a full copy, as H3 is the target of the FlashCopy relationship and not in the remote copy relationship between site 1 and site 3. Due to the error in setting up the failback to avoid a full copy, the H3 to H1 relationship performs a full copy of the data.
The Copy Services Manager GUI fails when testing a non-default Active Directory configuration.	Copy Services Manager adds a prefix to the <b>baseDN</b> of the value <b>"cn=users,dc="</b> , and to the <b>bindDN</b> of the value <b>"cn="</b> . Enter your domain without these characters (for example, <b>something.domain.company.com</b> ). For users without the <b>cn=user,dc</b> format, contact IBM Support for assistance with manually updating the user registry.
Copy Services Manager does not support migrating from one Copy Services Manager server to another on z/OS.	If you need to migrate Copy Services Manager from one server to another on z/OS, contact IBM Support. Also, see the section titled "Backing up and restoring product data" in Chapter 2. of the <i>IBM Copy Services Manager User's Guide</i> for a high availability approach.

Table 3. IBM Copy Services Manager Version 6.1.4 known issues and workarounds (continued)

Issue	Explanation and possible workaround
The <b>Start H3H1H2/StartH3H2H1</b> command on a multi-target Metro Mirror - Global Mirror with Practice session receives a 0F52 hardware error.	During the <b>Start H3H1H2/Start H3H2H1</b> command operation for a multi-target Metro Mirror - Global Mirror with Practice session, a failover is issued to the H1/H2 volume to later establish H3 to H1/H2. If there are no paths between H1/H2 and H3, you receive a 0F52 error. The workaround for this scenario is to ensure that there are paths from H1/H2 to H3 and H3 to H1/H2 before you issue the <b>Start H3H1H2</b> or <b>H3H2H1</b> command.
The install and production root parameters are not properly named in the DS CLI install sample job IWNINST2.	The error lines in IWNINST2 have: CSMD_InstallRoot=/usr/lpp/IBM/CSMDSCLI CSMD_ProductionRoot=/opt/IBM/CSMDSCLI The correct parameter names are: CSM_InstallRoot=/usr/lpp/IBM/CSMDSCLI CSM_ProductionRoot=/opt/IBM/CSMDSCLI Change the parameter names before you run the install job. These parameters will be fixed in an upcoming PTF.

Table 3. IBM Copy Services Manager Version 6.1.4 known issues and workarounds (continued)

### Notices

This information was developed for products and services offered in the US. This material might be available from IBM in other languages. However, you may be required to own a copy of the product or product version in that language in order to access it.

IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not grant you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing IBM Corporation North Castle Drive, MD-NC119 Armonk, NY 10504-1785 US

For license inquiries regarding double-byte character set (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

Intellectual Property Licensing Legal and Intellectual Property Law IBM Japan Ltd. 19-21, Nihonbashi-Hakozakicho, Chuo-ku Tokyo 103-8510, Japan

INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some jurisdictions do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM websites are provided for convenience only and do not in any manner serve as an endorsement of those websites. The materials at those websites are not part of the materials for this IBM product and use of those websites is at your own risk.

IBM may use or distribute any of the information you provide in any way it believes appropriate without incurring any obligation to you.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

IBM Director of Licensing IBM Corporation North Castle Drive, MD-NC119 Armonk, NY 10504-1785 US

Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement or any equivalent agreement between us.

The performance data discussed herein is presented as derived under specific operating conditions. Actual results may vary.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBMproducts. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

This information is for planning purposes only. The information herein is subject to change before the products described become available.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to actual people or business enterprises is entirely coincidental.

#### COPYRIGHT LICENSE:

This information contains sample application programs in source language, which illustrate programming techniques on various operating platforms. You may copy, modify, and distribute these sample programs in any form without payment to IBM, for the purposes of developing, using, marketing or distributing application programs conforming to the application programming interface for the operating platform for which the sample programs are written. These examples have not been thoroughly tested under all conditions. IBM, therefore, cannot guarantee or imply reliability, serviceability, or function of these programs. The sample programs are provided "AS IS", without warranty of any kind. IBM shall not be liable for any damages arising out of your use of the sample programs.

Each copy or any portion of these sample programs or any derivative work must include a copyright notice as follows: © (your company name) (year). Portions of this code are derived from IBM Corp. Sample Programs. © Copyright IBM Corp. \_enter the year or years\_.

If you are viewing this information softcopy, the photographs and color illustrations may not appear.

#### Privacy policy considerations

IBM Software products, including software as a service solutions, ("Software Offerings") may use cookies or other technologies to collect product usage information, to help improve the end user experience, to tailor interactions with the end user, or for other purposes. In many cases no personally identifiable information is collected by the Software Offerings. Some of our Software Offerings can help enable you to collect personally identifiable information. If this Software Offering uses cookies to collect personally identifiable information, specific information about this offering's use of cookies is set forth below.

This Software Offering does not use cookies or other technologies to collect personally identifiable information.

If the configurations deployed for this Software Offering provide you as customer the ability to collect personally identifiable information from end users via cookies and other technologies, you should seek your own legal advice about any laws applicable to such data collection, including any requirements for notice and consent.

For more information about the use of various technologies, including cookies, for these purposes, see IBM's Privacy Policy at http://www.ibm.com/privacy and IBM's Online Privacy Statement at http://www.ibm.com/privacy/details in the section entitled "Cookies, Web Beacons and Other Technologies," and the "IBM Software Products and Software-as-a-Service Privacy Statement" at http://www.ibm.com/software/info/product-privacy.

#### Trademarks

IBM, the IBM logo, and ibm.com are trademarks or registered trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at www.ibm.com/legal/copytrade.shtml.

Adobe is a registered trademark of Adobe Systems Incorporated in the United States, and/or other countries.

Java and all Java-based trademarks and logos are trademarks or registered trademarks of Oracle and/or its affiliates.

Linux is a registered trademark of Linus Torvalds in the United States, other countries, or both.

Microsoft and Windows are trademarks of Microsoft Corporation in the United States, other countries, or both.

UNIX is a registered trademark of The Open Group in the United States and other countries.

## IBM.®

Printed in USA